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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/534,196	03/24/2000	Christian Francois Michel Dujarric	Q58472	2963

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Sughrue Mion Zinn Macpeak & Seas PLLC
Robert J Seas
2100 Pennsylvania Avenue N W
Washington, DC 20037-3202

EXAMINER

KOCZO JR, MICHAEL

ART UNIT	PAPER NUMBER
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3746

DATE MAILED: 02/18/2004

35

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/534,196

Applicant(s)

DUJARRIC, CHRISTIAN
FRANCOIS MICHEL

Examiner

Michael Koczo, Jr.

Art Unit

3746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-14 and 16-26 is/are pending in the application.
- 4a) Of the above claim(s) 8-13 and 20-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-7, 14, 16-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Newly submitted claims 20 to 26 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 2-7, 14 and 16 to 19, drawn to a rocket engine, classified in class 60, subclass 231.
- II. Claims 20 to 26, drawn to a method of operating a rocket nozzle, classified in class 60, subclass 204.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the apparatus as claimed can be used to practice another and materially different process such as injecting fluid for cooling or for thrust vectoring without obtaining a three-dimensional separation of flow.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution

on the merits. Accordingly, claims 20 to 26 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the structure of claims 4 and 16 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

Claims 2 to 7 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 14, line 9 recites “a plurality of mutually spaced independent separation triggering elements”. It is not understood in what sense the elements are “independent”.

Claim 6 recites the distance D as a function of the location of spontaneous separation of flow at sea level. However, the location of spontaneous flow is a function of operating parameters such as the pressure and velocity of the gas within the rocket nozzle, which parameters are beyond the scope of the claim. This renders the claim indefinite.

Claim Rejections - 35 USC § 102

Claims 2, 3, 6, 7, 14, 18 and 19, as understood, are rejected under 35 U.S.C. 102(b) as being structurally anticipated by Mueller. Mueller discloses a plurality of mutually spaced separation triggering elements (for example holes 220 in figure 5) positioned on an injection cross section of the divergent nozzle body perpendicular to the axis of the nozzle body, and a means for simultaneously injecting fluid through the mutually spaced separation triggering elements of said injection cross section of the divergent nozzle body. Whether or not a three dimensional separation of flow occurs is merely a desired result, and is furthermore dependent on operational parameters, such as injection pressure, and the pressure and velocity of the gas in the nozzle, for example, which operational parameters are beyond the scope of the claims. This recitation of a desired result is therefore not patentably limiting.

When a claim includes a "whereby" clause or similar clause, it must contain, in order to be complete, an enumeration of sufficient elements to perform the function so specified in such clause. A "whereby" clause is not objectionable. It merely states the result and adds nothing to the patentability of a claim (Israel v. Cresswell, 76 USPQ 594; In re Boileau, 1948 C.D. 83).

Claims 2, 3, 6 and 14, as understood, are also rejected under 35 U.S.C. 102(b) as being structurally anticipated by Rannie et al. (see injection holes in figures 4 and 8).

Claims 2, 3, 4, 6, 14 and 16, as understood, are rejected under 35 U.S.C. 102(b) as being structurally anticipated by Pennington (note diametrically opposed injection holes 26 in figure

12).

Claims 2, 3, 5, 6, 14 and 17, as understood are rejected under 35 U.S.C. 102(b) as being structurally anticipated by Wilhite (note the three injection orifices in figure 4).

Response to Arguments

Applicants arguments merely point out differences in operation of the nozzles of the prior art and that of the claims. However, applicant fails to point out how the claims define structurally over the prior art.

Conclusion

Claims 8 to 13 and 20 to 26 stand withdrawn from further consideration as being drawn to non-elected inventions and species.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

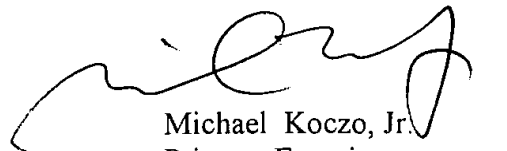
Any inquiry relating to the status of this application or proceeding should be directed to the Customer Service Office whose telephone number is 703-306-5648.

Any inquiry relating to patent applications in general should be directed to the Patent Assistance Center at 1-800-786-9199.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Koczo, Jr. whose telephone number is 703-308-2630. The examiner can normally be reached on M-F; 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Justine Yu can be reached on 703-308-2675. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Michael Koczo, Jr.
Primary Examiner
Art Unit 3746